Fact Sheet
November
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DTSC Releases Soil Sample Results to Garden Valley Residents

GARDEN VALLEY, CALIFORNIA

DTSC is one of six Boards and the California Environmental Protection Agency. The Department's mission is to restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality, by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.
State of California

California Environmental Protection Agency

Introduction

In the autumn of 2000, The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) conducted soil sampling for naturally occurring asbestos. DTSC has sent information about the soil sample results to the Garden Valley residents who gave DTSC voluntary access to their private roads. Also, DTSC has released the Report on Surface Soil Sampling for Naturally Occurring Asbestos in Garden Valley (Report). The Report contains the final results of the soil sampling for naturally occurring asbestos. This Report is available for public review at the Garden Valley Fire House, 4860 Marshall Road, Garden Valley CA., 95633.

This fact sheet describes the soil sampling results for naturally occurring asbestos in private unpaved roads, school bus stops, one of the Marshall Road cuts, and the two serpentine quarries. Also it summarizes the study's conclusions and provides you contacts for further information. Terms in bold italics are defined in the Glossary.

TABLE 1
GARDEN VALLEY ASBESTOS RESULTS SUMMARY

Sample Location	Samples	PLM results	TEM results
Bear Creek Quarry	29	< 0.25% to 15%	0.67% to 7.3%
Garden Valley Aggregates	35	< 0.25% to 4.5%	0.17% to 2.7%
Unpaved Roads	52	Non-detect to 4.0%	<0.1% to 7.7%
School Bus Stops	13	Non-detect to 2.8%	<0.1% to 5.9%
Cut on Marshall Road	8	<0.25% to 1%	<0.1% to 0.61%

Note: Currently there is no established "safe" level for asbestos in soil

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.dtsc.ca.gov.

In 1998 and 1999, the California Environmental Protection Agency, Air Resources Board (ARB) conducted air monitoring in the Garden Valley area and detected concentrations of asbestos fibers in air that could pose a potential health risk. DTSC decided to identify the potential sources of naturally occurring asbestos which may contribute to airborne asbestos emissions. With this goal in mind, In September 2000, DTSC sampled surface soil material from Bear Creek Quarry and Garden Valley Aggregates, unpaved roads that contain serpentine rock, a Marshall Road cut, and several school bus stops.

Initially, DTSC sent the soil samples to two separate laboratories approved to handle asbestos analysis. Data from the two labs was inconsistent with each other and with historical sampling data. As a result, DTSC contracted with a third lab to clear up the inconsistences. The labs used two different means of analysis, ***PLM*** and ***TEM***. DTSC has summarized the most reliable Garden Valley asbestos results in Table 1.

Asbestos is a naturally occurring mineral present in soil and rock such as serpentine found throughout the coastal, foothill and Sierra Nevada mountain areas of California. People have historically used processed asbestos for insulation, ceiling tiles, floor tiles, and automotive brake pads among other uses.

Asbestos is classified as a known human cancer causing substance by state, federal, and international health agencies. Although there are a number of natural varieties of asbestos, these organizations consider that all forms of asbestos pose a potential health threat. A fibrous material, asbestos may cause lung cancer, mesothelioma (a rare cancer of the lung linings), and asbestosis (a non-cancer respiratory disease). Asbestos may pose a health problem when it is released to the air and inhaled.

Private Road Results

DTSC collected soil samples from the road beds of sixteen privately owned roads that were surfaced with serpentine rock. The property owners gave voluntary access to DTSC to conduct sampling. The percentage of asbestos found in the private road beds ranged from less than 0.1% to 7.7 % asbestos fibers. DTSC has sent the soil sample results to these property owners. Please see the attached map for the private roads where DTSC collected samples.

Bus Stops, and the Marshall Road Cut Soil Sample Results

Soil samples from the fourteen selected school bus stops ranged from less than 0.1% to 5.9% asbestos fibers. At one Marshall Road cut, with eight samples, soil ranged from less than 0.1% to 0.61% asbestos fibers. See the map for the sample locations.

Quarry Results

DTSC collected soil samples from two quarries located in Garden Valley, Bear Creek Quarry and Garden Valley Aggregates. Garden Valley Aggregates is an inactive quarry and Bear Creek Quarry is still active. DTSC took twenty nine surface soil samples

at Bear Creek Quarry and twenty five at Garden Valley Aggregates. The results are summarized on page one. The map on page four shows the locations of the two quarries.

Study Conclusions

Based upon the results of this study and air sampling conducted by DTSC and ARB, DTSC has found numerous sources of low percentage levels of naturally occurring asbestos throughout Garden Valley. DTSC's analysis of the study results indicate that the unpaved private roads covered with serpentine gravel are the primary source of asbestos found in air samples taken in the Garden Valley area. Therefore, DTSC plans to conduct a pilot air monitoring study focused on the serpentine covered privately owned roads. DTSC has contracted with the Volpe National Transportation Systems Center of the Federal Department of Transportation to assist with this pilot study. DTSC will send out a fact sheet about the details of this focused study.

If asbestos is found close to your home, the risk that it poses may or may not be significant. Risk depends on the concentration and duration of exposure to airborne asbestos.

DTSC recommends reducing the possibility of exposure by covering or minimizing the the disturbance of asbestos bearing materials. The ARB Internet web site at www.arb.ca.gov/toxics/asbestos/3control.htm provides information on options to reduce exposure to naturally occurring asbestos. If you do not have access to the Internet, please contact DTSC staff.

Information Contacts

If you have questions about asbestos, the sampling activities or future activities in Garden Valley, please feel free to contact:

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Members of the media please contact Lisa Gray at (916) 324-0936.

Also DTSC has arranged for a copy of the soil sampling results to be available for review at the Garden Valley Fire House, 4860 Marshall Road, Garden Valley CA 95633.

Glossary

PLM-- A method which counts asbestos fibers with a Polarized Light Microscope and reports them as a percentage.

TEM-- A method using a Transmission Electron Microscope to count asbestos fibers based on number, volume, and density.